

THE ABSURDITIES OF WATER FLUORIDATION

Fluoridation of the water supply is an unethical, unnecessary, ineffective, unsafe and inequitable practice, and its supporters include powerful vested interests in industry, government and the medical/dental profession.

by Paul Connett, PhD

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From the websites:
[http://www.redflagsweekly.com/
connett/2002_nov28.html](http://www.redflagsweekly.com/connett/2002_nov28.html)
and
[http://www.fluoridealert.org/
absurdity.htm](http://www.fluoridealert.org/absurdity.htm)

Water fluoridation is a peculiarly American phenomenon [although it has also been adopted in many other countries – Ed.]. It started at a time when asbestos lined our pipes, lead was added to gasoline, PCBs filled our transformers and DDT was deemed so "safe and effective" that officials felt no qualms about spraying kids in school classrooms and seated at picnic tables. One by one, all these chemicals have been banned, but fluoridation remains untouched.

For over 50 years, US government officials have confidently and enthusiastically claimed that fluoridation is "safe and effective". However, they are seldom prepared to defend the practice in open public debate. Actually, there are so many arguments against fluoridation that it can get overwhelming. To simplify things, it helps to separate the ethical from the scientific arguments.

For those for which ethical concerns are paramount, the issue of fluoridation is very simple to resolve. It is *not* ethical; we simply shouldn't be forcing medication on people without their "informed consent". The bad news is that ethical arguments are not very influential in Washington, DC, unless politicians are very conscious of millions of people watching them. The good news is that the ethical arguments are buttressed by solid, common-sense arguments and scientific studies which convincingly show that fluoridation is neither "safe and effective" nor necessary. I have summarised the arguments in several categories:

Fluoridation is UNETHICAL because:

- 1) It violates the individual's right to informed consent to medication.
- 2) The municipality cannot control the dose of the patient.
- 3) The municipality cannot track each individual's response.
- 4) It ignores the fact that some people are more vulnerable to fluoride's toxic effects than others; some people will suffer, while others may benefit.
- 5) It violates the Nuremberg code on human experimentation.

Dr Arvid Carlsson, recipient of the Nobel Prize for Medicine in 2000, stated: "I am quite convinced that water fluoridation, in a not-too-distant future, will be consigned to medical history... Water fluoridation goes against leading principles of pharmacotherapy, which is progressing from a stereotyped medication—of the type 'take 1 tablet 3 times a day'—to a much more individualised therapy as regards both dosage and selection of drugs. The addition of drugs to the drinking water means exactly the opposite of an individualised therapy."

Dr Peter Mansfield, a physician from the UK and advisory board member of the recent government review of fluoridation (McDonagh et al., 2000), stated: "No physician in his right senses would prescribe for a person he has never met, whose medical history he does not know, a substance which is intended to create bodily change, with the advice: 'Take as much as you like, but you will take it for the rest of your life because some children suffer from tooth decay.' It is a preposterous notion."

Fluoridation is UNNECESSARY because:

- 1) Children can have perfectly good teeth without being exposed to fluoride.
- 2) The promoters (CDC, 1999, 2001) admit that the benefits are topical, not systemic, so fluoridated toothpaste, which is universally available, is a more rational approach to delivering fluoride to the target organ (teeth) while minimising exposure to the rest of the body.

3) The vast majority of Western Europe has rejected water fluoridation, but has been equally as successful as the US, if not more so, in tackling tooth decay.

4) If fluoride were necessary for strong teeth, one would expect to find it in breast milk—but the level there is 0.01 ppm, which is 100 times *less* than in fluoridated tap water (IOM, 1997).

5) Children in non-fluoridated communities are already getting the so-called "optimal" doses from other sources (Heller et al., 1997). In fact, many are already being overexposed to fluoride.

Fluoridation is INEFFECTIVE because:

1) Major dental researchers concede that fluoride's benefits are topical, not systemic (Fejerskov, 1981; Carlos, 1983; CDC, 1999, 2001; Limeback, 1999; Locker, 1999; Featherstone, 2000).

2) Major dental researchers also concede that fluoride is ineffective at preventing pit and fissure tooth decay, which is 85% of the tooth decay experienced by children (*JADA*, 1984; Gray, 1987; White, 1993; Pinkham, 1999).

3) Several studies indicate that dental decay is coming down just as fast, if not faster, in non-fluoridated industrialised countries as fluoridated ones (Diesendorf, 1986; Colquhoun, 1994; World Health Organization, Online).

4) The largest survey conducted in the US showed only a minute difference in tooth decay between children who had lived all their lives in fluoridated compared to non-fluoridated communities. The difference was not clinically significant nor shown to be statistically significant (Brunelle and Carlos, 1990).

5) The worst tooth decay in the United States occurs in the poor neighbourhoods of the largest cities, the vast majority of which have been fluoridated for decades.

6) When fluoridation was halted in communities in Finland, the former East Germany, Cuba and Canada, tooth decay did not go up but continued to go down (Maupome et al., 2001; Kunzel and Fischer, 1997, 2000; Kunzel et al., 2000; Seppa et al., 2000).

Fluoridation is UNSAFE because:

1) Fluoride accumulates in our bones and makes them more brittle and prone to fracture. The weight of evidence from animal studies, clinical studies and epidemiological studies on this is overwhelming. Lifetime exposure to fluoride will contribute to higher rates of hip fracture in the elderly. (See Studies.)

2) Fluoride accumulates in our pineal gland, possibly lowering the production of melatonin—a very important regulatory hormone (Luke, 1997, 2001).

3) Fluoride damages the enamel (dental fluorosis) of a high percentage of children. Between 30% and 50% of children have dental fluorosis on at least two teeth in optimally fluoridated communities (Heller et al., 1997; McDonagh et al., 2000).

4) There are serious, but yet unproven, concerns about a connection between fluoridation and osteosarcoma in young men (Cohn, 1992), as well as between fluoridation and the current epidemics of both arthritis and hypothyroidism.

5) In animal studies, fluoride at 1 ppm in drinking water increases the uptake of aluminium into the brain (Varner et al., 1998).

6) Counties with 3 ppm or more of fluoride in their water have lower fertility rates (Freni, 1994).

7) In human studies, the fluoridating agents most commonly used in the US not only increase the uptake of lead into children's blood (Masters and Coplan, 1999, 2000) but are also associated with an increase in violent behaviour.

8) The margin of safety between the so-called therapeutic benefit of reducing dental decay and many of these end points is either nonexistent or precariously low.

Fluoridation is INEQUITABLE because:

1) Fluoridated water goes to all households and the poor cannot afford to avoid it if they want to, because they're unable to purchase bottled water or expensive fluoride removal equipment.

2) The poor are more likely to suffer from poor nutrition, which is known to make children more vulnerable to fluoride's toxic effects (Massler and Schour, 1952; Marier and Rose, 1977; ATSDR, 1993; Teotia et al., 1998).

3) Very rarely, if ever, do governments offer to pay the costs of those who are unfortunate enough to get dental fluorosis severe enough to require expensive treatment.

Fluoridation is INEFFICIENT and NOT COST-EFFECTIVE because:

1) Only a small fraction of the fluoridated water actually reaches the target. Most of it ends up being used to wash the dishes, flush the toilet or water lawns and gardens.

2) It would be totally cost-prohibitive to use pharmaceutical-grade sodium fluoride (the substance which has been tested) as a fluoridating agent for the public water supply. Water fluoridation is artificially cheap because—unknown to most people—the fluoridating agent is an unpurified hazardous waste product of the phosphate fertiliser industry.

3) If it were deemed appropriate to swallow fluoride (even though its major benefits are topical, not systemic) a safer and more cost-effective approach would be to provide fluoridated bottled water in supermarkets free of charge. This approach would allow both the quality and the dose to be controlled. Moreover, it would not force it on people who don't want it.

Fluoridation is UNSCIENTIFICALLY PROMOTED

1) In 1950, the US Public Health Service enthusiastically endorsed fluoridation before one single trial had been completed.

2) Even though we are getting many more sources of fluoride today than we were in 1945, the so-called "optimal concentration" of 1 ppm has remained unchanged.

3) The US Public Health Service has never felt obliged to monitor the fluoride levels in our bones, even though it has known for years that 50% of the fluoride we swallow each day accumulates there.

4) Officials that promote fluoridation never check to see what the levels of dental fluorosis are in the communities before they fluoridate, even though they know that this level indicates whether children are being overdosed or not.

5) No US agency has yet to respond to Luke's finding that fluoride accumulates in the pineal gland, even though her findings were published in 1994 (abstract), 1997 (PhD thesis), 1998 (paper presented at conference of the International Society for Fluoride Research), and 2001 (published in *Caries Research*).

Fluoride accumulates in our bones and makes them more brittle and prone to fracture.

6) The CDC's 1999 and 2001 reports advocating fluoridation were both six years out of date in the research they cited on health concerns.

Fluoridation is UNDEFENDABLE IN OPEN PUBLIC DEBATE

The proponents of water fluoridation refuse to defend this practice in open debate because they know that they would lose that debate. The vast majority of health officials around the US and in other countries who promote water fluoridation do so based upon someone else's advice and not based upon first-hand familiarity with the scientific literature. This second-hand information produces second-rate confidence when these officials are challenged to defend their position, which has more to do with faith than with reason.

Those who pull the strings of these public health "puppets" do know the issues and are cynically playing for time and hoping that they can continue to fool people with the recitation of a long list of "authorities" which support fluoridation, instead of engaging in the key issues. As Brian Martin made clear in his book, *Scientific Knowledge in Controversy: The Social Dynamics of the Fluoridation Debate* (1991), the promotion of fluoridation is based upon the exercise of political power, not on rational analysis. The question to answer, therefore, is: "Why is the US Public Health Service choosing to exercise its power in this way?"

Motivations, especially those which have operated over several generations of decision-makers, are always difficult to ascertain. However, whether intended or not, fluoridation has served to distract us from several key issues:

a) The failure of one of the richest countries in the world to provide decent dental care for poor people.

b) The failure of 80% of American dentists to treat children on Medicaid.

c) The failure of the public health community to fight the huge overconsumption of sugary foods by the nation's children, even to the point of turning a blind eye to the wholesale introduction of soft-drink machines into schools. Their attitude seems to be, "If fluoride can stop dental decay, why bother controlling sugar intake?"

d) The failure to address adequately the health and ecological effects of fluoride pollution from large industry. Despite the damage which fluoride pollution has caused and is still causing, few environmentalists have ever conceived of fluoride as a "pollutant".

e) The failure of the US EPA to develop a maximum contaminant level (MCL) for fluoride in water which can be scientifically defended.

f) The fact that more and more organofluorine compounds are being introduced into commerce in the form of plastics, pharmaceuticals and pesticides. Despite the fact that some of these compounds pose just as much a threat to our health and environment as their chlorinated and brominated counterparts (i.e., they are highly persistent and fat soluble, and many accumulate in the food chains and our body fat), those organisations and agencies which have acted to limit the wide-scale dissemination of these other halogenated products seem to have a blind spot for the dangers posed by organofluorine compounds.

So while fluoridation is neither effective nor safe, it continues to provide a convenient cover for many of the interests which

stand to profit from the public's being misinformed about fluoride.

Unfortunately, because government officials have put so much of their credibility on the line defending fluoridation, it will be very difficult for them to speak honestly and openly about the issue. As with the case of mercury amalgam, it is difficult for institutions such as the American Dental Association to concede to the health risks because of the liabilities waiting in the wings if they were to do so.

However, difficult as it may be, in order to protect millions of people from unnecessary harm it is nonetheless essential that the US government begin to move away from its anachronistic, increasingly absurd *status quo* on this issue. There are precedents; they were able to do this with hormone replacement therapy.

But getting any honest action out of the US government on this is going to be difficult. Effecting change is like driving a nail through wood: science can sharpen the nail, but we need the weight of public opinion to drive it home. Thus, it is going to require a sustained effort to educate the American people and then recruit their help to put sustained pressure on our political representatives. At the very least, we need a moratorium on fluoridation (which simply means turning off the tap for a few months) until there has been a full congressional hearing on the key issues with testimony offered by scientists on both sides.

With the issue of education, we are in better shape than ever before. Most of the key studies are available on the Internet (see

<http://www.slweb.org/bibliography.html>), and there are videotaped interviews with many of the scientists and protagonists whose work has been so important to a modern re-evaluation of this issue (see videos at <http://www.fluoridealert.org>).

With this new information, more and more communities are rejecting new fluoridation proposals at the local level. On the national level, there have been some hopeful developments as well, such as the EPA Headquarters Union coming out against fluoridation and the Sierra Club seeking to have the issue

re-examined. However, there is still a huge need for other national groups to get involved in order to make this the national issue it desperately needs to be in the United States.

I hope that if there are *RFW* [*Red Flags Weekly*] readers who disagree with me on this, they will rebut these arguments. If they can't, then I hope they will get off the fence and help end one of the silliest policies ever inflicted on the citizens of the United States. It is time to end this folly of water fluoridation without further delay. It is not going to be easy. Fluoridation represents a very powerful "belief system" backed up by special interests and by entrenched governmental power and influence.

Editor's Note:

All references cited in this article can be found at the web pages <http://www.fluoridealert.org/reference.htm> and <http://www.slweb.org/bibliography.html>.

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The vast majority of Western Europe has rejected water fluoridation.

Copy this page and send it to your nearest politicians – and dentists!

OPEN LETTER [released 31 August 2004] to:

**The Premier of Queensland
Queensland Minister for Health
Lord Mayor of Brisbane
Deputy Lord Mayor of Brisbane
Councillors, all Cities and Shires of Queensland**

We wish to express our grave concerns regarding renewed proposals to fluoridate Queensland's water supplies. Fluoridation began at a time when asbestos lined our pipes, when lead was added to petrol, and DDT was regarded as safe and effective. These chemicals have now been banned, but fluoridation remains untouched (www.fluoridealert.org/absurdity.htm).

Research is now raising doubts about fluoridation's effectiveness. Data compiled by the World Health Organization shows tooth decay has declined at a similar rate in all Western countries, irrespective of each country's water or salt fluoridation status (www.fluoridealert.org/WHO-DMFT.htm).

New evidence for potential, serious harm from long-term fluoride ingestion is also emerging. This evidence is summarised on the following websites: www.fluoridealert.org/limeback.htm and www.fluoridealert.org/50-reasons.htm.

It is extraordinary that the same people who reject abundant global evidence about the association between fluoride ingestion and organ damage (e.g., to bones, teeth, glands or immune system) embrace the questionable science used to support its benefits. They ignore the many confounding possible influences in this research. This includes sugar consumption (averaging 1 kg per week per person in Australia, much of which is hidden), other nutritional influences, general dental hygiene, use of floss and movements in population.

Recent studies by several eminent researchers strongly suggest that fluoride works primarily by topical means through direct action on the surface of the teeth via toothpaste or gels used in dental treatments (www.slweb.org/bibliography.html; see XIII, "topical versus systemic effects") (Centers for Disease Control [CDC], 1999 and 2001). Ingestion of fluoride through drinking fluoridated water is not essential nor effective for caries reduction.

Hardy Limeback, PhD, DDS, BSc, (Associate Professor and Head, Preventive Dentistry, University of Toronto, and Past President of the Canadian Association for Dental Research) apologised in 1999 for inadvertently misleading both his colleagues and dental students in his support for fluoridation. Addressing them, he concluded: "For the past 15 years, I had refused to study the toxicology information that is readily available to anyone. Poisoning our children was the furthest thing from my mind" (www.fluoridealert.org/news/1537.html).

The fluoridating agent most commonly used is a hazardous contaminated industrial-grade product from the phosphate fertiliser industry (www.fluoridealert.org/phosphate/overview.htm). We strongly reject the notion that placing a chronic poison in our water supplies is clever preventive medicine. We represent 1,500 doctors, dentists, scientists and others working in the interests of public health who are primarily interested in prevention and early intervention in disease processes.

The question of fluoridation was considered with care, openness and good representation by the Lord Mayor's Task Force in 1997, which came down clearly against fluoridating Brisbane's water supply (www.fluoride-journal.com/98-31-4/314-232.htm). It is astounding that this issue could again be raised in Queensland in an apparently co-ordinated national campaign. No new evidence has been put forward to our knowledge that would warrant a revision of the 1997 decision.

We will urge Queenslanders to study the evidence showing potential serious harm from long-term fluoride ingestion and to inform their councillors and state members how they feel about this matter.

Yours sincerely,

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